

# **PACKERS AND STOCKYARDS STATISTICAL REPORT 2001 REPORTING YEAR**

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## **INTRODUCTION**

### Reporting Firms

This report contains data on (1) slaughtering packers; (2) market agencies buying or selling livestock on commission, including auction markets and all other selling agencies; and (3) livestock dealers buying and selling livestock for their own accounts. It includes data for firms' 2001 reporting year. Part III of the report includes data on all entities registered with the Grain Inspection, Packers and Stockyards Administration.

All slaughtering packers operating in commerce in the United States have been subject to the Packers and Stockyards Act since its passage in 1921. Section 201.97 of Chapter 9 of the Code of Federal Regulations requires every packer, live poultry dealer, stockyard owner, market agency, and dealer, unless exempt, to file a report annually with the U.S. Department of Agriculture's (USDA) Grain Inspection, Packers and Stockyards Administration (GIPSA). Prior to reporting year 1977, packers slaughtering less than 1,000 head of cattle or less than 2,000 head of all classes of

livestock annually were exempted from the reporting requirements. Beginning with reporting year 1977, packers that purchase \$500,000 or less of livestock annually have been exempt from the reporting requirements. Since both slaughter volume and the value of purchases vary from year to year, certain small slaughtering packers are required to file an annual report in some years but not in others. Packers beginning operation late in their fiscal year are not required to file annual reports for a partial year. Also, packers going out of business generally are not required to file annual reports, except those firms involved in mergers and acquisitions. In such cases, the acquiring firm is required to file.

A number of firms that slaughter livestock for others (custom slaughterers) are not required to file annual reports with GIPSA and their data are not included in this report. In 2001, 254 firms operating 337 plants reported to GIPSA. In comparison, on January 1, 2001, there were 910 federally inspected plants and 2,341 non-federally inspected plants. Many of these plants operate solely or primarily as custom slaughterers and are not required to file reports with GIPSA because the firms do not purchase more than \$500,000 worth of livestock annually.

The following table compares the number of plants operated by firms reporting to GIPSA in 2001 with all federally inspected (F.I.) plants by type of livestock. The number of head for plants reporting to GIPSA are procured for slaughter and do not include any livestock the plants custom-slaughter for others. The number of head for F.I. plants include all livestock slaughtered regardless of who owned the livestock.

**Number of plants operated by firms reporting to GIPSA  
and number of federally inspected (F.I.) plants, 2001**

<b>Type of livestock</b>	<b>GIPSA coverage</b>		<b>F.I. plants</b>	
	<b>Less than 1,000 head</b>	<b>All plants</b>	<b>Less than 1,000 head</b>	<b>All plants</b>
Cattle	44	185	540	723
Calves	35	68	237	310
Hogs	24	182	447	699
Sheep/lamb	32	62	463	538

Packers reporting to GIPSA accounted for the following percentages of commercial slaughter in 2001:

<b><u>Type</u></b>	<b><u>Percent</u></b>
Steers and heifers	98
Cows and bulls	87
Cattle	96
Calves	87
Hogs	98
Sheep and lambs	85

**Calendar Year/Reporting Year**

In most cases, the calendar year and a packer's reporting year are the same. A majority of meat packers use the calendar year as their fiscal, or operating, year for accounting purposes. Many packers, however, use fiscal years that end in months other than December. GIPSA includes the data supplied by these packers in the year in which each packer's fiscal year ends. Thus, for

example, data from a packer whose fiscal year ends May 31, 2001, is included in the 2001 reporting year.

**Type of Outlet**

Prior to 1988, GIPSA reported statistics separately for terminal markets, in which sales are made by private treaty, and for auctions, in which sales are made through open public bidding. Beginning in 1988, GIPSA combined livestock volumes sold through terminals and auctions, and reported those sales as "public markets" sales due to few terminal markets and the small numbers of livestock traded at terminal markets.

**Consolidated Reports of Firms**

Packing firms may elect to file consolidated reports for all of their slaughter operations unless the slaughter operations are bonded separately. Since 1980, annual reports filed by separately bonded units of a firm have been combined by GIPSA when reporting firm-level data, such as concentration ratios.

**HIGHLIGHTS OF THIS REPORT**

**What's New**

One new table (table 14) shows the four largest steer and heifer packers' use of packer feeding, forward contracts, and marketing agreements by month.

## Concentration of Meatpacking Firms

This report contains two series of concentration ratios<sup>1</sup> for steers and heifers, cows and bulls, cattle, hogs, and sheep and lambs. The first is based on procurement data reported to GIPSA by packers, and includes all livestock procured for slaughter by each firm, including livestock custom-slaughtered for reporting packers by other firms and livestock slaughtered in State-inspected plants. The data are reported by firms for their fiscal years. The second concentration series is based on slaughter data collected by USDA's Food Safety and Inspection Service (FSIS) from federally inspected plants. These data are for the calendar year. FSIS reports the number of animals slaughtered at each plant regardless of who owns the animals. GIPSA adjusts these data to reflect ownership of the animals based on information provided by reporting packers. Both series use total commercial slaughter for the calendar year as the denominator for calculating concentration ratios. The discussion that follows is based on concentration ratios calculated using the adjusted FSIS data.

After reaching a high of 70.4 percent in 1999, four-firm concentration in cattle slaughter declined to 69 percent in 2001 and 69.2 percent in 2002 (see table 27). A broader measure of concentration,

the Herfindahl–Hirschman Index<sup>2</sup> (HHI), increased slightly from 1,420 in 2000 to 1,422 in 2001.<sup>3</sup>

The four-firm concentration ratio for steer and heifer slaughter has been relatively stable since 1994. The ratio fell from 80.4 percent in 2001 to 79.6 percent in 2002. The HHI decreased from 1,939 in 2000 to 1,909 in 2001 (see table 28). Steer and heifer slaughter has the highest 4-firm concentration ratio in the red meatpacking industry.

Four-firm concentration in cow and bull slaughter increased from 24 percent in 1992 to 32 percent in 2000, and jumped to 44.3 percent in 2002 (see table 29). The HHI rose from 456 in 2000 to 520 in 2001.

Four-firm concentration in hog slaughter rose nearly 10 percentage points to 55.3 percent in 1996, but has been relatively stable between 54 percent and 57 percent since 1996 (see table 31). The ratio was 56.7 percent in both 2001 and 2002. The HHI rose slightly from 1,033 in 2000 to 1,035 in 2001.

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<sup>1</sup>A concentration ratio is defined as the percentage of total activity (e.g., slaughter, livestock purchases) accounted for by the largest firms, usually the four largest firms.

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<sup>2</sup> The HHI is defined as the sum of each firm's squared percentage of market share. The Department of Justice and the Federal Trade Commission consider markets to be unconcentrated when the value of the HHI is below 1,000, moderately concentrated when HHI is between 1,000 and 1,800, and highly concentrated when HHI is above 1,800. (U.S. Department of Justice and the Federal Trade Commission, Horizontal Merger Guidelines, issued April 2, 1992, revised April 8, 1997).

<sup>3</sup> HHI values are not available for 2002.

Four-firm concentration in sheep and lamb has averaged between 65 percent and 73 percent since 1992 and was 65.3 percent in 2002 (see table 32). Based on the information reported to GIPSA, the HHI was 1,378 in 2001.

Overall concentration in the red meatpacking industry has increased markedly over the last two decades. In 1980, the four largest firms (in terms of total dollar amount spent for all livestock slaughtered) accounted for less than 26 percent of all livestock procured for slaughter (see table 34). Concentration increased slowly until 1986, and then jumped from 37 percent to 47 percent in 1987. Concentration continued to increase, reaching 62.9 percent in 1993. Four-firm concentration was relatively stable at about 62 to 63 percent between 1993 and 1998, and then increased to 66 percent in 2000 and 65 percent in 2001. The HHI was 1,280 in 2001.

#### Number and Size of Plants

The total number of packing plants operated by firms reporting to GIPSA continued to fall, declining from 344 in 2000 to 337 in 2001 (see table 1). The number of plants slaughtering cattle declined by about 3 percent, calves 1 percent, and hogs 3 percent (see table 17). In contrast, the number of sheep and lamb slaughtering plants remained the same in 2001.

While the overall number of packing plants operated by reporting packers has fallen over the years, the number of slaughter plants in the largest size categories has remained relatively steady (see tables 18 through 24). The number of slaughter plants in the smallest size category (slaughtering less than 1,000 head) for cattle, calves, and sheep and lambs increased in 2001, and the

number of slaughter plants for hogs remained the same in 2001. The number of plants in the middle size categories declined.

#### Specialization of Packers

The total number of reporting meatpackers dropped from 810 in 1980 to 254 in 2001 (see table 1). Table 25 shows that most of the decline occurred among firms that slaughter two or more types of livestock. Since the mid-1990s, the majority of packers purchasing more than \$5 million worth of slaughter livestock have specialized in only one type of livestock. Table 26 shows the trend in percentage terms. The proportion of packers slaughtering only one type of livestock has risen steadily from about 17 percent in 1980 to 49 percent in 2001.

#### Use of Public and Nonpublic Marketing Channels

Packer purchases at public markets include purchases at auction and terminal markets at public stockyards, and video auctions. Purchases through nonpublic marketing channels include direct purchases by packers at their plants, packer-owned buying stations, feedyards, and from dealers.

The proportion of all types of livestock bought by packers in public markets declined in 2001 (see table 2). Most of the changes were small (less than 2 percentage points). The use of public markets by calf packers dropped sharply from more than 50 percent of their total calf purchases in the early 1980s to less than 20 percent in the early 1990s. Since then it has fluctuated between 22 percent and 24 percent. Hog packers' use of public markets continued to decline in 2001, to about 2 percent of their total hog purchases. The proportion of sheep and lambs bought by packers in public markets

was fairly constant from the early 1980s through the mid-1990s, ranging between 16 percent and 21 percent. The proportion fell to less than 10 percent in 2001.

The proportion of slaughter cattle purchased in public markets has been relatively stable at 13 percent to 14 percent since the early 1990s. About 70 percent of cattle purchased at public markets were cows and bulls. Packers purchased about 60 percent of their slaughter cows and bulls through public marketing channels in 2001, but only about 4 percent of slaughter steers and heifers were purchased through public markets (see tables 5 and 6).

Packers' use of public marketing channels to purchase cattle varies geographically (see table 7). Packers used public markets much more frequently to purchase steers and heifers in the South Atlantic region than in other regions (see table 5). Packers used public markets to purchase the majority of their slaughter cows and bulls in every region except the Southern Plains region (see table 6).

Hog slaughterers showed much less regional variation in their use of public markets (see table 9). In 2001, in all regions except the North Atlantic, packers purchased less than 5 percent of their hogs in public markets, while packers in the North Atlantic region procured about 13 percent of their hogs through public markets.

Smaller packers continued to rely on public markets for their slaughter needs more than larger packers (see table 3). The four largest packers procured the smallest proportion of their slaughter needs in public markets compared with other packers, and the

proportion grows as packer size decreases. In 2001, the 20 largest packers procured 10 percent of their cattle and less than 1 percent of their hogs through public markets. In contrast, packers smaller than the top 20 procured 41 percent of their slaughter cattle and 10 percent of their hogs through public markets.

#### Carcass-Basis Procurement

The proportion of slaughter livestock purchased on a carcass basis (such as grade, weight, yield, guaranteed yield, or percentage lean) in 2001 ranged from 46 percent for cows and bulls to 72 percent for hogs (see table 11). The percentage of cattle purchased on a carcass basis rose to an all-time high of 56 percent in 2001 (see table 12). About one half of all slaughter calves bought in 2001 were procured on a carcass basis. The proportion of hogs purchased on a carcass basis fell slightly from 74 percent in 2000 to 72 percent in 2001, and remains the highest among all types of slaughter livestock. The percentage of sheep and lambs purchased on a carcass basis rose to 60 percent in 2001 from 56 percent in 2000.

The 20 largest packers, based on total amount spent for all livestock slaughtered, purchased a larger percentage of cattle and hogs on a carcass basis than did other packers (see table 12). In 2001, the 20 largest packers purchased 84 percent of their hogs and 57 percent of their cattle on a carcass basis, compared to other packers who purchased 23 percent of their hogs and 45 percent of their cattle on a carcass basis.

#### Packer Feeding, Forward Contracts, and Marketing Agreements

GIPSA defines captive supplies as livestock that are owned or fed by a packer more than 14 days prior to slaughter, livestock that are

procured by a packer through a forward contract or marketing agreement that has been in place for more than 14 days, or live-stock that are otherwise committed to a packer more than 14 days prior to slaughter. This definition includes animals pro-cured through forward contracts, marketing agreements, and packer feeding arrangements.

GIPSA audited the top four firms' captive supply filings for steers and heifers for 1999, 2000, and 2001. Table 13 contains statistics calculated from unaudited data reported by the top 15 packers for 1988–98 and audited data for the top four firms from 1999 to 2001. Table 14 shows monthly variation in use of captive supplies by the four leading steer and heifer packers.

The top four steer and heifer packers' use of forward contracts and marketing agreements rose from 24 percent in 1999 to about 32 percent of their total steer and heifer procurement in 2001 (see table 13). Packer feeding of steers and heifers by the top four firms increased by less than 1 percentage point to about 9 percent of their total slaughter in 2000 and increased to about 11 percent in 2001. Overall, in 2001, the use of all forms of captive sup-plies by the top four steer and heifer packers rose to 43 percent, its highest level.

#### Packer Financial Performance

Tables 35 through 39 present financial ratios for several group-ings of the 40 largest meatpacking firms. Firms are ranked by to-tal expenditures for slaughter livestock. All firms in these tables slaughter livestock. Some of the firms also further process car-casses, and some have large non-red meat operations. Often these firms file financial statements only for their red meat oper-

ations. However, a few firms file consolidated financial statements in which their meatpacking and processing operations are combined with their other operations. Thus, the financial statistics calculated from packers' reports may include the financial performance of non-meat operations of some firms.

Profitability (measured by operating income as a percentage of sales) of the 40 largest meat packers has fluctuated widely since 1992 (see table 39). In 1992 and 1993, profitability of the top 40 firms was 1.2 percent of sales. Profitability rose to 2.9 percent of sales in 1994 and 3.7 percent in 1995. These declined to 1.8 per-cent to 2.4 percent during 1996–98. Profitability of the top 40 firms has declined in recent years from 2.75 percent in 1999 to 1.56 per-cent in 2001, its lowest level since the early 1990s.

The 20 largest packers reported larger profits as a percentage of sales than packers ranked 21 through 40 throughout the 1992–2000 period. This trend reversed in 2001. Throughout the 1992–2001 period, firms ranked 9 through 20 reported larger profits than the top four or top eight packers.

The top four firms generally have operated on smaller gross margins (also known as gross income) than smaller firms (see tables 35 and 37). Between 1993 and 2001, the top four firms reported gross margins as a percentage of sales that were 11 to 18 percentage points below firms ranked 5 through 8. The top four packers' oper-ating expense ratios were also lower (see tables 35 and 38). The top four firms reported higher net sales per dollar of assets and equity than any other group in 2001 (see table 36).

### Auction and Terminal Market Purchases

The number of cattle and calves marketed through firms selling on commission was 39.2 million in 2001, about the same as in 2000. The number has fluctuated between 38.5 million and 42.2 million since 1995 (see table 42). The volume of hogs marketed through firms selling on commission showed a downward trend throughout the 1990s, falling to 7.7 million head in 2000. The number increased slightly to 7.8 million in 2001. The number of sheep and lambs marketed through firms selling on commission fluctuated during 1990s. The highest volume was 5.7 million head in 1996 and the lowest was 3.9 million in 2000. The number of sheep and lambs marketed through firms selling on commission increased to 4.1 million head in 2001.

### Livestock Purchases by Dealers and Order Buyers

Purchases of cattle and calves by dealers and order buyers<sup>4</sup> fell to 33 million head in 2001 after increasing for two consecutive years (see table 42). Purchases of hogs and pigs by dealers and order buyers increased slightly in 2001, to 19 million head, which was still 55 percent below the highest level of the decade, reached in 1993. The number of sheep and lambs purchased by dealers and order buyers in 2001 showed almost no change from 2000, and remained 3.3 million head.

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<sup>4</sup> Order buyers purchase on a commission basis for others.

## **MERGERS AND ACQUISITIONS IN MEAT PACKING**

Numerous mergers and acquisitions have occurred in meat packing during the past several years. The following table lists mergers and acquisitions in 2001 and 2002 involving at least one firm that is required to file an annual report with GIPSA. Most transactions involved the purchase of entire firms; one, which is noted, included only one plant.

### **Meat Packer Mergers and Acquisitions, 2001–2002**

#### 2001

Acquiring Company: Excel Co.; Wichita, KS.

Company Acquired: Emmepak Foods; Milwaukee, WI.

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.

Company Acquired: Gorges/Quik-to-Fix Foods, Inc.; Dallas, TX.

Acquiring Company: Tyson Foods; Springdale, AR.

Company Acquired: IBP, inc.; Dakota Dunes, SD.

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.

Company Acquired: Moyer Packing Co.; Souderton, PA.

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.

Company Acquired: Packerland Packing Co.; Green Bay, WI.

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.

Company Acquired: RMH Foods, Inc.; Morton, IL.

2001, continued

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.  
Company Acquired: Stadler's Country Hams, Inc.; Elon College, N.C.

Acquiring Company: Pork America, Inc.; North Liberty, IA.  
Company Acquired: Hog slaughter plant in Estherville, IA, from Ace Union Foods; Taiwan.

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.  
Company Acquired: Smithfield Companies; Portsmouth, VA.

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.  
Company Acquired: Pinnacle Foods (50 percent stake); Pottstown, PA.

Acquiring Company: An investment group led by Hicks, Muse, Tate & Furst; Dallas, TX.

Company Acquired: ConAgra Red Meats, to be known as Swift and Company; Omaha, NE.

Acquiring Company: Excel Corp.; Wichita, KS.

Company Acquired: Taylor Packing Co.; Wyalusing, PA.

2002

Acquiring Company: Booth Creek Management Corporation; Vail, CO.

Company Acquired: Coleman Natural Products; Denver, CO.

Acquiring Company: Booth Creek Management Corporation; Vail, CO.

Company Acquired: B3R Country Meats; Childress, Texas.

Acquiring Company: Booth Creek Management Corporation; Vail, CO.

Company Acquired: Gerhard's Napa Valley Sausage; Napa CA.